

AMENDMENT TO THE CLAIMS

With this Amendment, claims 23-26 are withdrawn from consideration, claims 1-3, 7-10, 14, 21 and 28 have been amended, no claims have been cancelled and no new claims have been added. The status of the claims (claims 1-28) is as follows:

1. (Currently Amended) A method of enzymatically degrading a raw vegetable composition prior to human consumption, the method comprising:

providing a raw whole vegetable composition having a moisture content of less than about 30 weight percent, wherein the raw whole vegetable composition comprises a first outer layer connected or in adhesive contact to an inner portion of the vegetable composition;

applying an aqueous enzyme composition comprising water, a protease and a cellulase to the raw vegetable composition under normal atmospheric pressures for a time that is sufficient to degrade the raw vegetable composition, wherein the aqueous enzyme composition is at an initial pH of between about 2.0 and 7.0; and

deactivating the aqueous enzyme composition.

2. (Currently Amended) The method of claim 1 wherein the aqueous enzyme composition is effective to degrade [[a]] the first outer layer of the raw vegetable composition.

3. (Currently Amended) The method of claim 1 wherein the aqueous enzyme composition is effective to reduce [[a]] the cook time of the raw vegetable composition.

4. (Previously Presented) The method of claim 1 wherein the aqueous enzyme composition is effective to hydrate the raw vegetable composition.

5. (Previously Presented) The method of claim 4 wherein the raw vegetable composition absorbs more than about 0.003 grams water per minute per gram of the raw vegetable composition.

6. (Previously Presented) The method of claim 1 and further including applying a second aqueous enzyme composition to the raw vegetable composition, wherein the second aqueous

enzyme composition comprises at least one enzyme that is selected from the group consisting of alpha-galactosidase, mannanase, beta-gluconase, beta-gluconase, arabinase, xylanase, beta-galactosidase, invertase, beta-fructofuranosidase, alpha-amylase, beta-amylase, pectinase, pectin depolymerase, pectin methyl esterase, pectin lyase, glucoamylase, oligo-1,6 glucosidase, protease, lactase, beta-*d*-glucosidase, and any combination thereof.

7. (Currently Amended) A method of enzymatically processing a vegetable composition prior to human consumption, the method comprising:

providing a raw whole vegetable composition having a moisture content of less than about 30 weight percent, wherein the raw whole vegetable composition comprises a first outer layer connected or in adhesive contact to an inner portion of the vegetable composition;

applying a first enzyme composition comprising water, at least one protease and a cellulase to the raw vegetable composition under normal atmospheric pressures for a time that is sufficient to form an enzyme-degraded raw vegetable composition, wherein the first enzyme composition is at a pH of between about 2.0 and 7.0;

applying a second enzyme composition comprising water and a carbohydrase to the enzyme-degraded raw vegetable composition; and
deactivating the first enzyme composition and the second enzyme composition.

8. (Currently Amended) The method of claim 7 wherein the second enzyme composition comprises at least one enzyme ~~enzymes~~ that is selected from the group consisting of hemicellulase, alpha-galactosidase, mannanase, beta-gluconase, beta-gluconase, arabinase, xylanase, beta-galactosidase, invertase, beta-fructofuranosidase, alpha-amylase, beta-amylase, pectinase, pectin depolymerase, pectin methyl esterase, pectin lyase, glucoamylase, oligo-1,6 glucosidase, lactase, beta-*d*-glucosidase, and any combination thereof.

9. (Currently Amended) A method of processing a vegetable composition prior to consumption, the method comprising:

providing a raw whole vegetable composition having a moisture content of less than about 40 weight percent, wherein the raw whole vegetable

composition comprises a first outer layer connected or in adhesive contact to an inner portion of the vegetable composition;

applying an enzyme composition having a pH of between about 2.0 and 7.0 to the raw vegetable composition under normal atmospheric pressures for a time that is sufficient to degrade the raw vegetable composition, wherein the enzyme composition includes water, a first enzyme component, and a second enzyme component, wherein the first enzyme component includes a cellulase that degrades the raw vegetable composition, and wherein the second enzyme component includes a protease that degrades a protein or a peptide; and
deactivating the enzyme composition.

10. (Currently Amended) The method of claim 9 wherein the raw vegetable composition is a legume, a soybean, ~~grain~~, an edible seed, a green unfermented cocoa bean, or any combination of any of these.

11. (Previously Presented) The method of claim 9 wherein the protease degrades a hydrophobic amino acid containing protein, a hydrophobic amino acid-containing peptide, or any combination of any of these.

12. (Canceled).

13. (Canceled).

14. (Currently Amended) A method of processing a vegetable composition prior to consumption, the method comprising:

providing a raw whole bean having a moisture content of less than about 30 weight percent, wherein the raw whole vegetable composition comprises a first outer layer connected or in adhesive contact to an inner portion of the raw whole bean; and

applying an enzyme composition having a pH of between about 2.0 and 7.0 to the raw bean under normal atmospheric pressures for a time that is sufficient to degrade the raw bean, wherein the enzyme composition includes

water, at least one protease, and a cellulase that degrades the raw whole bean.

Claims 15-20 (Canceled).

21. (Currently Amended) A method of processing a vegetable composition prior to consumption, the method comprising:

providing a raw whole vegetable composition having a moisture content of less than about 40 weight percent, wherein the raw whole vegetable composition comprises a first outer layer connected or in adhesive contact to an inner portion of the vegetable composition;

applying an enzyme composition having an initial pH of between about 2.0 and 7.0 to the raw vegetable composition for a time that is sufficient to degrade the raw vegetable composition, wherein the enzyme composition includes water, at least one cellulase, at least one protease, alpha-galactosidase and alpha-amylase, wherein the enzyme composition is effective to degrade the raw vegetable composition; and
deactivating the enzyme composition.

22. (Withdrawn) The method of claim 21 wherein the raw vegetable composition is a legume, a soybean, a grain, an edible seed, a green unfermented cocoa bean, or any combination of any of these.

23. (Withdrawn) An enzyme-degraded vegetable composition comprising a raw whole vegetable composition degraded by an enzyme composition comprising water, at least one cellulase, and at least one protease at an initial pH of about 2 to about 7.

24. (Withdrawn) The enzyme-degraded vegetable composition of claim 23 wherein the raw whole vegetable composition is a legume, a soybean, grain, an edible seed, a green unfermented cocoa bean, or any combination of any of these.

25. (Withdrawn) An enzyme degraded raw whole vegetable composition degraded by an enzyme composition comprising water, at least one cellulase, alpha-galactosidase, alpha-amylase and at least one protease at an initial pH of about 2 to about 7.
26. (Withdrawn) The enzyme-degraded vegetable composition of claim 25 wherein the raw whole vegetable composition is a legume, a soybean, grain, an edible seed, a green unfermented cocoa bean, or any combination of any of these.
27. (Previously Presented) The method of claim 1 wherein deactivating the enzyme composition includes freezing, drying, freeze-drying, canning, frying, hydrating, boiling, extruding, steaming, blanching, blending, cooking, baking, roasting, fermenting, peeling, pasteurizing, extracting, grilling, milling, puffing, micro-waving, enzymatic degradation, grinding, grating, pulverizing, steam-pressure cooking, or any combination of any of these.
28. (Currently Amended) The method of claim 21 wherein the enzyme composition is effective to degrade raffinose and stachyose in ~~reduce a raffinose and stachyose content of~~ the raw whole vegetable composition.